Jessica L. Wood. Today's Field Recordings, Tomorrow's Archives: A Survey of Media Formats and Storage Practices Used by Ethnomusicology Professors. A Master's Paper for the M.S. in L.S degree. April, 2013. 49 pages. Advisor: Richard Marciano

This paper investigates the current practices and future plans of ethnomusicology professors in the archiving of their field recordings. Citing literature on ethnomusicologists' increasing distrust of field recordings as authentic data sources, and on the associations of field recordings archives with histories of colonialism, the study investigates whether negative associations with ethnomusicology archives correlates with a decreased likelihood of future deposits. The survey also measures ethnomusicologists' knowledge of archival practices, particularly with regard to format, digital file storage, and metadata. Findings suggest that a majority of scholars still plan to deposit their materials at an institutional archive and that these scholars anticipate academic researchers to be the primary users of their archives.

Headings:

Audiovisual archives

Music archives

Digital preservation

Academic discourse

Archives – Social aspects

TODAY'S FIELD RECORDINGS, TOMORROW'S ARCHIVES: A SURVEY OF MEDIA FORMATS AND STORAGE PRACTICES USED BY ETHNOMUSICOLOGY PROFESSORS

by
Jessica L. Wood

A Master's paper submitted to the faculty
of the School of Information and Library Science
of the University of North Carolina at Chapel Hill
in partial fulfillment of the requirements
for the degree of Master of Science in
Library Science.

Chapel Hill, North Carolina

April 2013

Approved by

_____

Richard Marciano

Table of Contents

Introduction

Since the 1960s, there has been an expectation in the field of Ethnomusicology for scholars to conduct their own fieldwork and make their own field recordings. This contrasts with the tendency of previous ethnomusicologists to base their scholarly work on field recordings gathered by others and housed in archives such as the Berliner Phonogramm-Archive or the British Library Sound Archive. Increasingly, these earlier ethnomusicologists came to be dismissed as "armchair" scholars, critiqued for studying musical works out of their social context. These scholars, the field recordings they studied, as well as the ethnographers who initially made those recordings, became associated with nineteenth and twentieth century histories of colonialism, insofar as the recordings were treated as "raw materials" reaped from non-industrialized areas, used for the benefit of privileged Westerners, and with minimal regard for the intellectual property rights of the source communities.

Over time, this attitude shift has led to two tendencies: 1) an unwillingness by current ethnomusicologists to engage with field recordings archives as sources of data and 2) a proliferation of original field recordings made by each new generation of scholars. Though ethnomusicologists of the past two decades have worked with field recordings archives as part of repatriation efforts, examples of scholars using those recordings as bases for musical, cultural, or historical analysis are rare. This results partly from associations of field recordings archives with colonialist politics, but also from the implicit assumptions by ethnomusicologists that the authenticity of sound recordings is more fraught than that of other archival media. That is, even though historical

photographs, film footage, field notes or prose description have the potential to misrepresent the communities under study, many prominent ethnomusicologists have circulated in print the idea that sound recordings are more susceptible than other media to problems of authenticity (Sewald, 2004).

This paper seeks to gauge the impact of these tendencies on the beliefs, practices and plans of current ethnomusicologists with regard to their own field recordings. Are today's scholars less likely to deposit their recordings in archives, being aware of the history of unequal politics in field recordings archives? Has the decrease in scholarly analysis of these archives been accompanied by a decrease in likelihood of depositing materials? And for those scholars who do plan to deposit their recordings, who do they imagine to be the eventual users? In addition to these questions, this study also seeks to measure ethnomusicologists' knowledge of best practices for storage and documentation of sound recordings. The study investigates these issues among Ethnomusicology professors in the United States and Canada, a participant pool generated by searches of college and university websites. For the purposes of the study, the term "research recording" was used in place of "field recording," following the practice of Sewald (2004), to include scholars whose research may have included phone interviews or other non-traditional forms of fieldwork.

Literature Review

A number of scholars have described how Ethnomusicology emerged as an academic discipline in the late 1880s, facilitated partly by the invention of sound recording technology. Until the 1950s, much of the work in the discipline focused on "salvage ethnography"—that is, documenting languages and cultures thought to be

endangered by industrialism's spread into remote regions of the world. During this early phase, European and North American scholars (including many non-music specialists) travelled to indigenous communities to record their speech, music and rituals (Nettl, 2005; Seeger, 1986; Spear, 1994). Because the purpose for these recordings was to preserve cultural expression, they were typically deposited in recordings archives in Britain, Germany, and the United States, and used for transcription and study by a range of scholars who often had not participated in the data-gathering process (Porter, 1974; Seeger, 1986; Vallier, 2010).

Since the 1960s, a number of ethnomusicologists have critiqued this early phase of the discipline as a case of Westerners as paternalistic and colonizing, treating indigenous communities as sources of raw materials that could be taken from their context and used to benefit the careers of "armchair scholars" (Seeger 2001: 39). As noted by several scholars (Sewald, 2004; Laszlo, 2006; Fargion, 2009; Vallier, 2010), these critiques tainted field recordings archives as the products of unequal power dynamics, leading to a decrease in the use of those archives. Though ethnomusicologists have continued to make field recordings, since the 1960s it has become increasingly rare for scholars to deposit their recordings into public archives (Seeger, 1986; Chaudhuri, 1992; Cooper, 2007; Fargion, 2009). Fargion (2009) suggests that more recent ethnomusicologists have chosen to sidestep any colonialist implications with their work by not depositing them at an archive, keeping them for personal use (p. 81).

And regarding those field recordings that *have* made it into archives, ethnomusicologist Bruno Nettl (1991) has stated that the sole users tend to be those who made the recordings: "It may amaze the reader that few recordings (some in Eastern

Europe are clearly exceptions) are fully used by anyone other than the collectors. While the archives continue to grow, most scholars in their research rely upon their own recordings" (p. 52). Sewald (2004) corroborates this observation with an exhaustive review of ethnomusicological literature, showing how infrequently scholars from the 1960s and after have studied archived field recordings made by others. She argues that this also partly stems from the associations of the archives with cultural arrogance.

An additional way in which ethnomusicologists have avoided colonialist associations has been to focus on field recordings archives solely by way of repatriation. Where one struggles to find monographs, articles, or conference papers by current ethnomusicologists that mention the status of their own field recordings, or that analyze archived recordings, one finds a plethora of discussions of repatriation of historical recordings. Recent examples include the work of Aaron Fox and Chie Sakakibara (2008) to restore the intellectual property rights and to provide physical copies of Iñupiat recordings made in 1946 (which had been owned by Columbia University and Indiana University) to the present-day Iñupiat community in Barrow Alaska. Another example would include that of Sylvia Nannyonga-Tamasuza and Andrew Weintraub (2012) with historical field recordings of Uganda musicians. In both of these cases, the archives helped communities to revive musical traditions that had since been lost, as well as to provide occasions for the remembrance of ancestors. While these examples offer solutions for how to forge agreements with source communities that respect their cultural ownership, provide public access, and ensure long-term preservation of the original materials, they do not offer much to current scholars looking to set up equitable scenarios

for their own materials, which would ideally prevent the need for repatriation farther down the road.

While ethnomusicologists' monographs often include discographies and lists of recorded interviews in their citations, they generally do not contain information about the locations, formats, accessibility or plans for those recordings. Granted, there has been a trend to incorporate source communities more integrally into the creation of recordings, where the relationship between researcher and participant is one of artistic collaboration, where the finished product is a published recording rather than an article or a monograph. (This trend is described in Feld & Brenneis, 2004). But this type of project may not be possible for those scholars lacking the expertise in sound engineering, or who, for a variety of reasons, may prefer to work with print more than sound.

Relatively few studies have been conducted related to Ethnomusicology archives. One of the first was Robert Lancefield's study (1998) that used a survey method to assess the number of deposits of field recordings, as well the number and type of users of those field recordings archives. Janet Topp Fargion conducted interviews with ethnomusicologists primarily in the United Kingdom, including questions about the likelihood of deposit, the levels of documentation, the amount of training received in documenting, using, or archiving recordings. Fargion (2009) states that "only a small minority of the ethnomusicologists based in the UK say they have actively archived their recordings" (p. 83). Fargion, however, does not describe her methodology except to say that it involved interviews and "fieldwork"; one does not have a sense of how many participants were interviewed, and therefore the magnitude of the problems she addresses. Additionally, Liew & Ng (2006) used structured interviews to discover

ethnomusicologists' information needs. Though the focus of that study was concentrated more on secondary sources in circulating collections, they did find that the majority of scholars interviewed had plans to deposit their own field recordings to an official repository.

Finally, it is worth mentioning that the current Society for Ethnomusicology website offers a "Position Statement" on ethical and legal aspects of fieldwork, including statements on "sensitivity to proprietary concerns regarding recorded materials, photographs, and other documentation" and on "the potential protections and liabilities of contractual arrangements dealing with depositing, licensing, and distributing musical sound and audiovisual recordings." However, there is no information on the site offering guidelines or principles for practical or technological aspects of making, storing, or depositing field recordings. Though the Society has published a volume on "documentation, fieldwork, and preservation for ethnomusicologists," this was last updated in 2001, and does not cover many of the challenges associated with digital—and especially born-digital—materials that have developed during the past decade. Further, a search in WorldCat indicates that only 30 libraries in the U.S. and Canada own the 2001 volume: that is, fewer than there are Ethnomusicology programs in those two countries. It is hoped, by virtue of having received this survey, the issues will at least appear on ethnomusicologists' radar.

Methodology

For the purposes of this study, an ethnomusicologist was defined as a full-time faculty member employed within a Music Department with ethnomusicology identified as a research specialty. Though in reality, an ethnomusicologist may use archival research as a primary methodology, for the purposes of this study, an ethnomusicologist was considered someone for whom fieldwork was the primary methodology. Also, it was decided to limit the study to English-speaking institutions in North America, as Fargion's 2009 study focused on the United Kingdom, and also to avoid complications of having to translate the survey into multiple languages.

A list of four-year colleges and universities was generated using the U.S. Department of Education Database of Accredited Postsecondary Institutions and Programs, June 2012 edition (accessed at: http://ope.ed.gov/accreditation/GetDownloadFile.aspx). As a preliminary step, community colleges were removed from this list, as were schools that did not offer liberal arts education (such as schools of nursing, cosmetology, and health sciences). Websites for the music departments of each institution were located through Google searches. If the department site listed Ethnomusicology as a subdivision, names and emails of full-time professors listed within that subdivision were entered into the database. If not, "ethnomusicology" was entered into the search box for the institution's website; in cases where this brought up professors' department pages, these professors were added to the database along with their email addresses and year of Ph.D. degree where available. In some cases, this search identified professors affiliated with departments other than music, but whose research involved ethnographic study of music-related phenomena; these

professors were also added to the database. When possible, professors' pages were surveyed to ensure that their research involved a component of fieldwork.

Since a comparable database of postsecondary institutions does not exist for Canada,[i] a list of Canadian institutions was derived in part from the "Guide to Programs" page of the Society for Ethnomusicology website[ii] and in part from the "List of universities with ethnomusicology programmes" Wikipedia page.[iii] Once this list was compiled, the same procedure was applied as with institutions in the United States. Altogether, with U.S. and Canadian institutions, this process resulted in a database of 357 professors. The year of Ph.D. degree was available for all but 20 of these professors; of these, six were still in the process of completing their dissertation. There were 14 professors for whom that information could not be found.

On February 28, 2013, a survey cover letter containing a link to the survey was then emailed directly to all professors from the database. (This letter is included as Appendix A.) The letter explained the purpose of the survey, and gave a deadline of three weeks (until March 20, 2013) to complete it. The survey itself was created using Qualtrics survey tools, and included an introductory section, 23 questions (divided into six sections), and a space at the end for an optional free response. (The complete survey is included as Appendix B). One week before the close of the survey, a reminder was sent out to all professors on the list. The survey settings were set to allow participants to complete the survey in multiple sittings and to disallow multiple surveys being received from the same I.P. address.

The introductory section explained that "research recording" would be the topic of the study, and defined research recording to mean "an original audio or video

recording made at one's research site(s) and/or of one's research participants as part of the data gathering process." The term "research recording" was used in place of "field recording" to be as inclusive as possible, so as not to discourage participants whose research takes place someplace other than the "field" in the traditional sense, or whose research takes place through phone interviews (Sewald, 2004). The introduction went on to state that a research recording could include interviews, performances, social gatherings, or acoustic events, and that it should not include copies "made of pre-existing recordings, such as are found in archives."

The first of the six sections asked general questions about the type of content contained on the participants' recordings, the researcher's reason for making the recordings, and the importance of the recordings relative to the other types of data sources used by the participant. The second section asked about participants' practices for backing up recordings, including the approximate percentage of recordings they had backed up, reasons for not backing up some recordings, as well as the length of time that typically transpired between making the original recording and making the backup.

The third section asked participants about the formats used for the originals and backups of their recordings and offered space for free-text responses in case there were formats not provided on the list. Those participants who checked boxes used for digital formats (such as DVD, CD, hard drive, or digital recorder) were directed to an additional question asking to identify specific file formats used. This question also provided an option for a free-text response. The section also asked participants to identify the bit rate and sampling rates used for both their original and backup copies; it concluded by asking researchers about the importance of "lossless" formats for their recordings.

The fourth section asked participants about their practices for annotating their recordings, including the type of information included in their annotations, their reasons for not annotating some of their recordings, and the file-naming schemes used for any digital files. The fifth section asked participants about the storage of their recordings, including the storage of physical carriers, whether originals and backups were stored in the same physical location or on the same server, and any plans for long-term storage of the recordings. Those participants stating that they intended to deposit their recordings at an institutional archive were directed to an additional question asking about whom they imagined as the users of these recordings. Those participants who indicated that they did *not* intend to deposit their recordings at an institutional archive were asked to specify why they did not intend to do so.

The final survey section asked general questions to establish the background of the participants. Participants were asked for the year in which they received their terminal degree; in order not to collect any uniquely identifying information, date ranges of five years were given as options. They were then asked whether their degree program provided training in any of several named areas related to sound recordings archives. Following this, a space for a free response was provided for participants "to share any additional thoughts, experiences, or concerns related to research recordings formats, storage, or archives."

Findings

One professor sent an email in response to the initial survey invitation stating that he did not have time to participate, but that he had digitized and archived his reel-to-reel

and cassette tapes, as well as created a CD set and website featuring the materials. Another professor emailed to suggest “you might want to suggest that the results of the study would be made publicly available and an announcement to such an effect would be distributed to the same mailing cohort you are now addressing”; this professor did not go on to take the survey.

After the reminder email was sent to the same list of 357 professors, several other professors emailed me directly. One was an emeritus professor who stated: “I have made no field recordings since 1983, and these are stored privately in my home. I have no current practices or future plans to report, and thus will not participate in the survey.” Two others wrote to say that they were ineligible for the study, and one that he chose not to participate. Another wrote with some hostility that he should not have received a reminder email given that he to express frustration that he had received a reminder email after he had already completed the survey. Of all the email addresses in the database, only one came back undeliverable.

Out of the 357 professors who received a survey invitation, 40 went on to complete the survey in its entirety, producing a response rate of 11%. Seven additional professors partially completed the survey; most of these discontinued just before or just after the free response section. Response times varied from one minute to five hours. At the low end of the extreme were the three people who did not move beyond the first few questions. At the high end were likely participants who completed the survey in multiple sittings.

Forty-seven participants (100%) indicated that their research recordings contain interviews. Other common categories of recorded content included musical concerts or

shows (40 participants), rehearsals (33 participants), ceremonies or rituals (30 participants), festivals (28 participants), demonstrations of musical techniques, styles, etc. (29 participants), and music lessons (24 participants). The two free text responses included "field recording sessions" and "personally commissioned (open air) recording sessions." The full breakdown of recorded content appears below.

What do your research recordings document?	Number of Participants	Percent of Participants
Interviews	47	100%
Musical concerts or shows	40	85%
Rehearsals	33	70%
Jam sessions	19	40%
Ceremonies or rituals	30	64%
Parades	10	21%
Festivals	28	60%
Soundscapes, ambient sounds	19	40%
Music lessons	24	51%
Music classes or group instructional sessions	19	40%
Demonstrations of musical techniques, styles, etc.	29	62%
Focus groups	3	6%
Everyday conversations	16	34%
Recording studio sessions	19	40%
Other, please describe:	2	4%

Forty-six participants (98%) indicated that the purpose of their research recordings was to facilitate analysis; 37 (79%) that the recordings were to facilitate transcription, 37 (79%) that they were to document something for posterity, 34 (72%) that they were to give to musicians and communities who participated in the research, and 17 (28%) that they were for commercial release. Free text responses included: "to include in conference presentations and as examples in lecture classes," "to create an

archive on a specific topic," "to deposit in an audiovisual archive," "as sonic and visual evidence in themselves," and "for accuracy when quoting or analyzing."

Thirty-two participants (70%) indicated that their research recordings were one of their most important sources of data, six participants (13%) indicated that that recordings were their most important source of data, six participants (13%) that there were other more important sources of data, one participant (2%) that recordings were one of their least important sources of data, and one participant (2%) that all of their data sources were of equal importance.

Responses to the question of how many of these recordings were backed up were more spread, with 11 participants (24%) having backed up all their recordings, 14 participants (30%) having backed up almost all, two (4%) having backed up more than half, and 19 (41%) having backed up one half or fewer of their recordings. The full breakdown appears below.

How many of the originals of your research recordings are backed up?	**Number of Participants**	**Percent of Participants**
None	1	2%
Less than half	11	24%
About half	7	15%
More than half	2	4%
Almost all	14	30%
All	11	24%
I don't know.	0	0%

To the question of why not all recordings were not backed up, 25 (71%) responded that they did not have time, 10 (29%) that their recordings are not important enough to their research to warrant the time or effort, six (17%) that they lacked the playback equipment necessary, five (14%) that they lacked the software necessary, four

(11%) that the risk of loss or damage to the originals was too low to warrant the time and effort, one (3%) that they did not know how, and one (3%) that it did not occur to them. Free text responses included: “disorganization and lack of time to complete backups,” “I suspect that a few fell through the cracks,” “often I make a copy of a segment of a field tape that I need for study purposes without making a copy of the entire master,” and “I have not yet put together a comprehensive preservation plan.” Eighteen participants (40%) indicated that they typically create backup copies within two months after making the original, six participants (13%) that they create backups within three to six months, and six participants (13%) that they create backups after six months’ time, and 14 participants (31%) that their routine for creating backups varies too widely to speak in general terms. One participant wrote that s/he “donate[s] to an archive in batches” and another that s/he “waited over ten years” to make the backup.

Participants indicated a wide variety of media formats used for their research recordings, ranging from shellac disc (1 participant) to reel-to-reel film to digital carriers. The breakdown appears in the chart below.

On what physical carriers are the originals your research recordings stored?	**Number of participants**
MiniDisc (MD)	20
DVD	5
CD, CD-RW	3
CD-ROM	1
Digital audio tape (DAT)	19
Standard audio cassette	30
VHS tape	14
Other video tape format:	21
Reel-to-reel magnetic tape	8
Reel-to-reel film	2

Shellac disc	1
Wax cylinder	0
Hard drive	16
Thumb drive	3
Digital recorder (including iPod)	25
Other carrier, please list:	2
Not applicable.	0

A much smaller range of formats was used for backup recordings, with a tendency towards digital storage media and cassettes (audio cassettes or VHS). Free text responses for both originals and backups included: MiniDV, HD cards, Hi 8mm, digital video tape, iPhone, portable hard drive, VH8, and cloud.

On what physical carriers are the backups of your research recordings stored?	**Number of participants**
MiniDisc (MD)	0
DVD	20
CD, CD-RW	25
CD-ROM	9
Digital audio tape (DAT)	4
Standard audio cassette	14
VHS tape	11
Other video tape format:	4
Reel-to-reel magnetic tape	2
Reel-to-reel film	0
Shellac disc	0
Wax cylinder	0
Hard drive	34
Thumb drive	8
Digital recorder (including iPod)	8
Other carrier, please list:	3
Not applicable.	0

The most common digital file formats for both original and backup recordings were MP3, WAV, AIFF, and MOV. Formats listed in the free text fields included DAT, DV, MPEG2, and FLAC.

What specific file formats have you used? (For digital files)	Number of participants
MP3	15
Other MPEG format	6
WAV (Waveform Audio File Format)	26
AIFF (Audio Interchange File Format)	14
MOV (Quicktime)	14
RIFF (Resource Interchange File Format)	0
OGG/ OGA (Ogg Vorbis)	1
BWF (Broadcast Wave Format)	1
ASF (Advanced Streaming Format)	0
AVI (Audio Video Interleave)	6
RM (Real Media)	1
WMV (Windows Media Video)	2
RF64	0
DivX	0
Other, please list:	1
I don't know.	3
Not applicable.	1

Regarding the bit rate for both originals and backups of recordings, there was an even spread between 16-bit, 24-bit and 48-bit; 19 people indicated that they did not know what bit rate they had used. Regarding the sampling rate for originals and backups, 1 person indicated a rate of 32 kilohertz, 14 people indicated a rate of 44.1 kilohertz, 6 people indicated 48 kilohertz, one person indicated 88.2 kilohertz, three people indicated 96 kilohertz, and one person indicated 192 kilohertz. Twenty-two participants indicated that they did not know what kilohertz they had used for their research recordings.

Twenty-two participants (49%) indicated that they were familiar with the concept of a lossless format, and 23 participants (51%) that they were not. Of the 22 who

indicated familiarity with the concept, three indicated that it was not important to them, 10 that it was somewhat important, and 11 that it was very important.

The majority of participants indicated that they annotate their recordings always (16 participants, or 36%) or most of the time (21 participants, or 47%). Three participants (7%) indicated that they annotate their recordings about half of the time, four participants (9%) that they annotate less than half of the time, and one participant (2%) that they never annotate. The following chart shows the different type of information participants include in their annotations.

What information about the recordings' contents do you typically include in your annotations?	**Number of participants**	**Percent of participants**
An index number or a catalog number	14	32%
Your name, as person making the recording	22	50%
Title of research project	18	41%
Date of recording	44	100%
Time of day of recording	15	34%
City, town, or other place-name of recording location	40	91%
Geo-spatial coordinates of recording location	2	5%
Names of performers or participants included	43	98%
Titles of songs or performances included	31	70%
Musical instruments used	21	48%
Languages used	8	18%
Make/model of microphones used	6	14%
Make/model of recording device used	11	25%
Particular settings used on the recording device	4	9%
Microphone placement used for the recording	3	7%
Power source used during recording (battery, electrical outlet, etc.)	1	2%
Special recording techniques used	1	2%
Other information, please list:	4	9%

Free text responses included: “location of audience,” “analytic interests in making the recording,” and “translations.” One participant wrote that “Sometimes I will write a note about my impressions or interpretations of an interview immediately afterwards, and/or note info about the interviewee.”

Most common among the reasons for not annotating some research recordings was “I do not have time” (18 responses), followed by “I have a storage method that allows me to identify my recordings without using labels” (seven responses), “I do not remember to do so” (five responses), and “I do not have enough recordings to warrant the effort” (four responses). The free text responses included: “carelessness when making the recording.” Regarding file naming, 10 participants reported using an automated process for generating file names; seven participants indicated that they use the default numbering or naming supplied by their recording device, two indicated that they had set up their recording device to apply file names automatically that include certain information, and one person that s/he uses the default file name supplied by her/his audio editing software. On the other hand, 37 participants indicated that they enter file names manually; of these, 18 reported following a specific convention and 19 reported not following any convention. The following chart shows the range of file-naming schemes used by participants entering file names manually.

File-naming convention used
topic_date
name of performer + number
Date plus summary of contents
Descriptive (name, place, date, genre)
numbering system used in original log
Topic/ repertoire/ name of the performer
project prefix + date
Date, Ensemble Name, Recording Number

name, date, place
I include date and description of event, then a number indicating how many are in the particular series for that event: "2013-4-5 Bg Concert Chicago - 1/2"
Example: Joe Smith 200130313J
Date, place, name of primary performer(s)
placed in folders according to research project/trip; file names have identifying info such as date, participant names, event (eg. interview)
RecordingNameOrPlace_Type[videoaudio]_Date.Format
Performer/informant - date
Original item label
Interviewee last name in CAPS then day-month-year of interview
I use my own catalog system for different fieldtrips, but most awkward for recordings that originate as digital fields. Then I catalog by date.

Free text responses regarding file naming included: “a university archivist assigned file names to my recordings when she made backup copies,” and “the tech guy in my department can do this for me.”

Thirty three respondents indicated that they store their originals and backup recordings at their private residence, 25 that they store the recordings at their office at the institution where they are employed, 11 that they store the recordings at a library or archival repository located outside of the institution where they are employed, and three that they store their recordings at a library or archival repository located within the institution where they are employed. Free text responses to the question of where original and master recordings are stored included: the Pogoplug network, Box.com, Google Drive, “in my briefcase on a portable hard drive,” and “digitization lab within my institution.”

Fourteen participants indicated that none of their backup copies were stored in the same location as their originals, eight that fewer than half of their backups and originals were stored in the same location, two that about half of their backups and originals were stored in the same location, six that more than half of their backups and originals were

stored in the same location, 11 that almost all of their backups and originals were stored in the same location, and three that all of their backups and originals were stored in the same location. To the question “What are your plans for the originals?,” 30 respondents indicated that they plan to deposit them at an institutional archive, five that they plan to deposit them with the community or individuals directly involved in their research, seven that they plan to leave them with their own next-of-kin, and 15 that they do not currently have long term plans for their original recordings. Free text responses to this question included: “I plan to place the most important ones online an in an iPad app,” “edit and make as many possible available in an online repository accessible to the general public,” and “only some will be archived; others are too sensitive.” One respondent wrote: “Canada’s major research organizations are about to implement requirements that funded research data be made available publicly on an institutional database.”

All participants who indicated that they planned to deposit their recordings at an institutional archive indicated that they anticipated the primary users of those recordings to be academic researchers; by this point in the survey 30 participants remained. Other common responses included: members of the community documented on the recordings, relatives of the participants documented on the recordings, inhabitants of the location where the recordings were made, research participants who are documented on the recordings, and other musicians not affiliated with the participants or with the location documented on the recording. Free text responses included: “students at my institution” and “students and people with an interest in the music (i.e. tourists or would-be tourists to this location).” The breakdown of these responses for originals, backups and other secondary copies appears below.

Of those participants indicating that they did not intend to deposit their recordings at an institutional archive, the most common reason indicated was that the recordings would not have enough research value beyond their own work (seven participants). The following chart shows the distribution of participants across different reasons for not depositing their research recordings.

You have indicated that you do not plan to deposit your research recordings at an institutional archive. Why not?	**Number of participants**
It did not occur to me.	2
It feels too soon for me to make plans for my recordings.	1
I have not yet had time to consider long-range plans for my recordings.	3
I do not know how to go about depositing my recordings.	1
It would take too much time or effort to arrange a deposit.	3
Depositing my recordings would violate the wishes or rights of my research participants.	3
There would be too many legal issues involved in depositing my recordings.	4
My recordings would not have enough research value beyond my own work.	7
My recordings would not make sense to anyone but me.	3
I do not think that any institution would be interested in my recordings.	4
Other, please describe:	3

Free text responses to this question included: “I did not ask permission of my consultants to do so” and “they are not polished enough or annotated well enough/consistently, along with concerns about access and right to share.”

All participants (45 remained at this point in the survey) indicated that they had completed their terminal degrees in 1970 or after. Twenty eight percent completed their degrees in 2000 or after, 18% completed their degrees between 1990-1999, 4% between 1980-1989, and 14% between 1970-1979.

In what year did you receive your terminal degree?	Number of participants	Percent of participants
Prior to 1960	0	0%
1960-1964	0	0%
1965-1969	0	0%
1970-1974	3	7%
1975-1979	3	7%
1980-1984	1	2%
1985-1989	1	2%
1990-1994	4	9%
1995-1999	5	11%
2000-2004	8	18%
2005-2009	13	29%
2010-2013	6	13%
I am still in the process of completing my terminal degree.	1	2%

As noted in the previous section, in preparing the initial database of 357 professors, the year of graduation for each professor was recorded in addition to email address. The average year of Ph.D. completion for the entire pool was 1997. Because the survey asked for ranges rather than specific years, it was not possible to derive an average year; however, the chart above indicates a similar distribution, though with proportionally fewer professors graduating in 1995-2005.

Those who indicated that they do plan to deposit the originals of their research recordings at an institutional archive were distributed relatively evenly across date ranges of terminal degree. This is shown in the following table.

Participants planning to deposit their recordings at an institutional archive (originals)	
Year of terminal degree	**Number of respondents**
1970-1974	3
1975-1979	3
1980-1984	1

1985-1989	1
1990-1994	4
1995-1999	4
2000-2004	4
2005-2009	5
2010-2013	4
In-progress	0
Total number respondents	29

Those who indicated that they do not currently have plans for the originals of their recordings tended to be those who graduated between 2000-2013, as shown in the following table.

I do not currently have plans for these recordings (originals)	
Year of terminal degree	**Number of respondents**
1970-1974	0
1975-1979	0
1980-1984	0
1985-1989	0
1990-1994	0
1995-1999	1
2000-2004	4
2005-2009	7
2010-2013	2
Total number respondents	**15**

Regarding the training received in their graduate programs, the majority of participants indicated that they had received training in the ethical issues of making research recordings, in types of recording equipment, and in recording techniques. Fewer than half of respondents reported that they had received training in types of recording formats, methods of labeling, indexing, or documenting their recordings, and the legal issues of making research recordings. Only 24% of respondents indicated that they had

received training in the proper storage of audiovisual recordings. The chart below shows the breakdown of these responses.

Did the graduate program you attended as a student give you formal or informal training in any of the following?	Number of participants	Percent of participants
Types of recording equipment	22	67%
Techniques of recording	20	61%
Types of recording formats	14	42%
Proper storage of audiovisual recordings	8	24%
Methods of labeling, indexing, or documenting the contents of research recordings	14	42%
Ethical issues in the making of research recordings	29	88%
Legal issues in the making of research recordings	13	39%

A cross-tabulation of terminal degree year and the type of training received shows that the scholars with the most training in the techniques and responsibilities of making recordings are those who graduated in 1995 or after.

	Did the graduate program you attended as a student give you formal or informal training in any of the following?						
In what year did you receive your terminal degree?	Types of recording equipment	Techniques of recording	Types of recording formats	Proper storage of audiovisual recordings	Methods of labeling, indexing, or documenting the contents of research recordings	Ethical issues in the making of research recordings	Legal issues in the making of research recordings
Prior to 1960	0	0	0	0	0	0	0
1960-1964	0	0	0	0	0	0	0
1965-1969	0	0	0	0	0	0	0
1970-1974	0	0	0	0	0	0	0
1975-1979	0	1	0	0	1	1	1
1980-1984	0	0	0	0	0	0	0
1985-1989	1	0	1	0	0	1	0
1990-1994	2	2	1	1	2	3	1
1995-1999	4	2	1	1	1	4	0
2000-2004	5	6	5	2	4	6	3
2005-2009	7	6	3	3	5	9	5
2010-2013	3	3	3	1	1	4	3

In-process	0	0	0	0	0	1	0

Sixteen respondents offered comments in the final free response section, a number of which described institutional or technological difficulties associated with managing their field recordings. One participant stated that "In addressing this topic, it is important to consider the constraints imposed by IRB boards (some of which will insist on levels of anonymity/documented consent that effectively preclude depositing field recordings in any kind of public archive)." One participant stated "Very hard for me as an old (55) scholar to deal with all of this—appropriate practice changes with technological changes every year or so; nothing I learned in grad school applies anymore." Another stated: "Universities should be encouraged to keep older forms of hardware and software in order to facilitate transfers between formats. I have four sets of backup copies for recordings made on digital and cassette recorders, kept on different hard drives, and some on DVD. But, the theft of my minidisc recorder, and the lack of minidiscs at my university, means there are some early 2000s recordings that I cannot listen to." Another participant provided a longer account:

> Storage and backup of older media (audio cassettes, 8mm video, 35mm slides) have been ongoing problems for me. I have neither the time nor the money to stay current with changes in equipment and media. My current institution has offered me little assistance with storage, backup, or conversion. They tell me that grants require some kind of public access component, but much of my material is too sensitive to make public. I would like to archive my recordings in the region in which I collected them, but the lack of climate controls and corruption controls make that too risky. Even with those controls, neither I nor the national archive in that country have the money to make it happen. That national archive is on shaky footing; what would happen to my recordings if they go under? For years now, I have felt absolutely alone in dealing with these problems. Could our own Library of Congress help? At the moment, I am simply waiting for retirement to figure this out. I will have no time before then. The only "product" recognized by my current institution is print publication. I get no reward for the time I put in to

> annotate, label, transcribe, back up or archive my collection. I hope I live long enough to take care of my large and valuable collection properly.

Another participant wrote to the ethical considerations associated with depositing their recordings, stating:

> I've been reticent to deposit my materials at archives at present since my impression is—and I really need to do more research!—that the archives closest to the communities I've written about, while they are run by marvelous people and are often digitally accessible online, don't have 1) quite enough controls to keep semi-public materials private for these digitized materials and 2) conversely, don't have ways to easily allow people from the "researched" communities to add context/interpretive materials/otherwise "own" the recordings I'd share.

Conclusions

A number of limitations are worth keeping in mind in interpreting the results of this survey. Perhaps most importantly, it is difficult to know how representative the participant pool is with regard to U.S. and Canadian ethnomusicologists as a whole. There is a possibility that those who chose to respond are those who have thought more deliberately than average about how they store and annotate their recordings—and that those who had paid minimal attention to their recordings, or whose recordings are disorganized or unlabeled, were more likely to opt out. After the conclusion of the study, I had the opportunity to discuss the survey with three scholars who voluntarily disclosed to me that they had taken it. In this conversation, they stated that they felt embarrassed during the survey upon realizing that they did not know what was meant by a lossless format, or what bit or sampling rate they had been using. It is possible, then, that the survey invitation or cover letter provoked similar feelings among some scholars, such that they did not wish to proceed. Another limitation of the study is that it excludes

graduate students, independent scholars, postdoctoral scholars, and unemployed scholars, who constitute the newest generation of ethnomusicologists.

Based on the survey, it appears that outreach may be needed to educate scholars regarding storage and backing up of their recordings—including those in physical as well as digital formats. Given that 41% of survey participants had backed up one half or less of their research recordings, that for most participants research recordings were one of their most important data sources, and that lack of time and equipment were most common reasons for not backing up recordings, it may be useful for archivists to produce a "best practices" workflow for individual scholars. Such a workflow might suggest steps for 1) backing up recordings in batches, 2) setting up recording devices to supply appropriate and automated metadata, 3) setting up recording devices to record to particular file formats, at particular bit and sample rates, 4) creating efficient procedures for linking recordings to related field notes and photographs, and 5) checking the backup fields periodically to ensure that files do not become corrupted over time. It may also be useful for the Society for Ethnomusicology website to provide a link to the Library of Congress page on "Care, Handling, and Storage of Audiovisual Materials,"[iv] or to invite the Library of Congress to prepare a version of this document tailored specifically for ethnomusicologists.

The survey also shows the prevalence of minidisc and DAT tape formats, even among newer scholars who received their terminal degrees in 2005 or after. This finding is different from that reported in the 2001 "Folk Heritage Collections in Crisis" report, which emphasized cassette tapes as the primary obsolete format (p. 61). Though the present survey shows that many original recordings are stored in minidisc, DAT and

cassette tape formats, and that many original recordings may not be backed up, it does not show how many original recordings on obsolete formats are also not backed up. The respondent who wrote in the free-response section that her/his institution did not have facilities to digitize minidisc recordings is likely indicative of a problem shared by many scholars in Ethnomusicology. It may be of use for a professional organization such as the Association for Recorded Sound Collections or the International Association of Sound and Visual Archives to the Society of Ethnomusicology with a list of reliable vendors who could digitize minidiscs or DAT tapes; in cases of professors at smaller institutions without digitization labs, this may be the most viable option.

For archivists anticipating deposits from ethnomusicologists, it may be useful to observe, based on this survey, that professors' research recordings seem by in large to be the sort that would require release forms or access restrictions in order to be made publically available—that is, they primarily include recordings of interviews, performances and rehearsals. Additionally, archivists may derive some comfort in the indication that most professors recording to digital formats are using the .wav format, which has become the preservation standard format for audio recordings. They may derive comfort as well from the number of survey participants who have approached digital file naming in a thoughtful, methodical way.

For ethnomusicologists, the survey reveals a curious discrepancy between the imagined and actual use of field recordings archives. On the one hand, as noted in the literature review, it has become increasingly rare for scholars to study archived field recordings made by others. On the other, 100% of survey participants indicated "academic researchers" as among the anticipated users of their own archives. An

additional study might ask ethnomusicologists to list potential research questions that, if pursued by future scholars, could benefit from their use their recordings. One could also ask ethnomusicologists to list existing scholarly works that make successful use of field recordings archives (outside the realm of repatriation). As it stands, it appears that ethnomusicologists are assuming that their archives will be of scholarly use, when there is little precedent for post-1960s scholars to do so except in contexts of repatriation. Presumably, the professors taking the survey do not imagine that future researchers will be using their recordings for repatriation projects. Thus, in order for their recordings to actually be used by scholars, it seems that there may need to be enough of a paradigm shift within Ethnomusicology that scholars can imagine how to use sound archives in a way that is sensitive to but not paralyzed by colonialist practices of the past.

NOTES

[i] The Canadian Information Centre for International Credentials website states that this is the case. See http://www.cicic.ca/679/Postsecondary_Programs.canada on August 14, 2012.

[ii] This list was accessed at: http://www.ethnomusicology.org/?GtP on August 13, 2012.

[iii] This list was accessed at: http://en.wikipedia.org/wiki/List_of_universities_with_ethnomusicology_programmes#Canada on August 13, 2012.

[iv] These guidelines are available at: http://www.loc.gov/preservation/care/record.html.

Reference List

"Care, handling, and storage of audio visual materials." (n.d.) Washington, D.C.: Library of Congress. Retrieved from http://www.loc.gov/preservation/care/record.html

Chaudhuri, S. (1992). Preservation of the world's music. In H. Myers (Ed.), *Ethnomusicology: An introduction* (365-374). New York: W.W. Norton & Co.

Cooper, M. (2007). Sharing data and results in ethnographic research: Why this should not be an ethical imperative." *Journal of Empirical Research on Human Research Ethics: An International Journal* 2, 3-19.

Fargion, J.T. (Ed.). (2001). *Manual for documentation, fieldwork & preservation for ethnomusicologists*. (2nd ed.). Bloomington, IN: Society for Ethnomusicology.

Fargion, J.T. (2009). "For my own research purposes"? Examining Ethnomusicology field methods for a sustainable music. *World of Music* 51(1), 75-93.

Feld, S. and Brenneis, D. (2004). Doing Anthropology in sound. *American Ethnologist* 31(4), 461-474.

Folk heritage collections in crisis. (2001). Washington, DC: Council on Library and Information Resources Publications, 2001. Retrieved from http://www.clir.org/pubs/reports/pub96/pub96.pdf

Fox, A. and Sakakibara, C. (2009) Bringing the songs home: Columbia University begins musical heritage repatriation project in the North Slope. Center for Ethnomusicology at Columbia University and the Barrow Arctic Science Consortium. Retrieved from http://music.columbia.edu/cecenter/basc/

Lancefield, R.C. (1998). Musical traces' retraceable paths: The repatriation of recorded sound. *Journal of Folklore Research* 35, 47-68.

Laszlo, K. (2006). Ethnographic archival records and cultural property. *Archivaria* 61, 299-307.

Liew, C.L. and Ng, S.N. (2006). Beyond the notes: A qualitative study of the information-seeking behavior of ethnomusicologists. *Journal of Academic Librarianship* 32, 60-68.

Nannyonga-Tamusuza, S. and Weintraub, A.N. (2012). The audible future: Reimagining the role of sound archives and sound repatriation in Uganda. *Ethnomusicology* 56(2), 206-233.

Nettl, B. (1991). "Hanging on for dear life." In *Discourse in Ethnomusicology III: Essays in honor of Frank J. Gillis* (50-61). Bloomington, IN: Ethnomusicology Publications Group.

Nettl, B. (2005). Hanging on for dear life: Archives and preservation. In *The study of Ethnomusicology: Thirty-one issues and concepts* (161-171). (2nd ed.). Urbana: University of Illinois Press.

Position statement on ethics. (1998). *Society for Ethnomusicology*. Society for Ethnomusicology, Inc. Retrieved from http://www.ethnomusicology.org/?EthicsStatement

Porter, J. (1974). Documentary recordings in Ethnomusicology: Theoretical and methodological problems." *Association of Recorded Sound Collections Journal* 1, 3-13.

Seeger, A. (1986). The role of sound archives in Ethnomusicology today. *Ethnomusicology* 30(2), 261-276.

Seeger, A. (2001). Intellectual property and audiovisual archives and collections. In *Folk heritage collections in crisis* (32-45). Washington, DC: Council on Library and Information Resources Publications. Retrieved from http://www.clir.org/pubs/reports/pub96/pub96.pdf.

Sewald, R.L. (2004). Back to the armchair: Sound recordings as information sources in ethnomusicological research. (Unpublished master's thesis). Indiana University, Bloomington, IN.

Sewald, R.L. (2005). Sound recordings and Ethnomusicology: Theoretical barriers to the use of archival collections. *Resound: A Quarterly of the Archives of Traditional Music* 24.1-2 (2005): 1-12.

Spear, L.S. (1994). Two for the price of one: The music library and the Ethnomusicology archive." *Music Library Association Technical Reports* 24, 60-67.

Vallier, J. (2010). Sound archiving close to home: Why community partnerships matter. *Notes* 67(1), 39-49.

Appendix A

Survey cover letter

Dear Scholar,

I am conducting a survey of ethnomusicology professors in the U.S. and Canada to discover what formats and storage practices are being used for making and storing audiovisual research recordings, including field recordings. The results of this will be the basis for my master's paper at the School of Information and Library Science at the University of North Carolina, Chapel Hill, supervised by Professor Richard Marciano.

You are receiving this email because, through a search of your institution's website, you have been identified as a professor with a specialty in the ethnographic study of music who may have made original audio or video recordings in the course of your research. If you do not feel this describes your work accurately, please disregard this message.

The survey will take approximately 30 minutes and will ask you about the media formats, labeling and file-naming practices you have used in the making, backing up, and storing of your research recordings, as well as about any general plans you may have for long-term housing of those recordings. By participating in this study, you will help audiovisual archivists to develop systems for long-term storage and public access that are best suited to the material, ethical, and legal challenges of today's music-centered research recordings.

You will not receive any direct benefits for participation in the study, nor are there any known risks. You will not be asked for your name or any other uniquely identifying information, and your responses will be analyzed and reported in aggregate. You are free to discontinue the survey at any time, though data from incomplete surveys will not be counted. Completion of the survey indicates your informed consent to participate.

Should you have any questions about the survey or about the project, you may contact me at: jessiwo@live.unc.edu or Professor Marciano at richard_marciano@unc.edu. The completed master's paper will be available to the public through the UNC-Chapel Hill Libraries catalog at this address: http://dc.lib.unc.edu/cdm/landingpage/collection/s_papers. This study (#13-1157) has been approved as IRB-exempt by the Office of Human Research Ethics at UNC-Chapel Hill.

Thank you for your consideration.
Sincerely,
Jessica Wood

Appendix B

Research Recordings Survey

Introduction:

This survey will ask you about your current practices and future plans with regard to your research recordings. For the purposes of this study, a research recording is defined as an original audio or video recording made at one's research site(s) and/or of one's research participants as part of the data gathering process. It may include interviews as well as performances, social gatherings, or acoustic events. It may also include silent film footage, so long as it documents a live event.

This survey is interested only in those recordings made by you or by one of your research associates for a project in which you were one of the principal authors. In your responses, do not include any copies you may have made of pre-existing recordings (such as archival recordings or mixtapes).

There are 6 parts to the survey with a space at the end for a free response. The exact number of questions will depend on your responses, but will not exceed 23 questions. Each one will ask you to check the box or boxes that best reflect your practices, plans, or attitudes with regard to your research recordings.

Thank you in advance for your time.

Part I. This section contains general questions about the nature of your research recordings.

1. What do your research recordings document? (Check all that apply.)

- ❑ Interviews
- ❑ Musical concerts or shows
- ❑ Rehearsals
- ❑ Jam sessions
- ❑ Ceremonies or rituals
- ❑ Parades
- ❑ Festivals
- ❑ Soundscapes, ambient sounds
- ❑ Music lessons
- ❑ Music classes or group instructional sessions
- ❑ Demonstrations of musical techniques, styles, etc.
- ❑ Focus groups
- ❑ Everyday conversations
- ❑ Recording studio sessions
- ❑ Other, please describe: _____

2. For what purpose(s) do you make these recordings? (Check all that apply.)

- ❑ To facilitate transcription
- ❑ To facilitate analysis (cultural, melodic, formal, etc.)
- ❑ To document for posterity
- ❑ To give to musicians and communities who participated in the research
- ❑ To release commercially
- ❑ Other, please describe: _____

3. Considering all the material you gather for your research (including photographs, print sources, field notes, commercial sound recordings, mixtapes, archival sources) how important to your finished scholarly output are your research recordings? (Check one.)

- ❍ They are my most important source of data.
- ❍ They are one of my most important sources of data.
- ❍ While important, there are other sources of data that are more important to my research.
- ❍ They are one of my least important sources of data.
- ❍ They are not important to my research as sources of data.
- ❍ All my sources of data are of equal importance to my research.
- ❍ Other, please explain: _____

Part II. This section asks about your current practices in backing up your research recordings.

A **backup** refers to a duplicate copy made of an original recording in anticipation of possible loss, damage, or decay to the original. A file can be backed up by making duplicate physical copies or by saving duplicate files to different servers or to different carriers (such as thumb drives, CD-ROMs, or personal computers).

4. About how many of the originals of your research recordings are backed up? (Check one.)

- ❍ None
- ❍ Less than half
- ❍ About half
- ❍ More than half
- ❍ Almost all
- ❍ All
- ❍ I don't know.

5. You have indicated that some your research recordings may not be backed up. What are your reasons for not backing up these recordings? (Check all that apply.)

- ❑ I do not have time.
- ❑ I do not know how.
- ❑ It did not occur to me.
- ❑ The recordings are not important enough to my research to warrant the time and effort.
- ❑ The risk of loss or damage to the originals is too low to warrant the time and effort.
- ❑ I do not have access to the necessary playback equipment to do so.
- ❑ I do not have access to the necessary software to do so.
- ❑ Other, please explain: _____

6. In cases where you have backed up your research recordings, how soon after making the original recording do you create the backup copy? (Check one.)

- ❍ My routine for creating backups varies too widely to speak in general terms.
- ❍ I typically create a backup immediately after making a recording.
- ❍ I typically create a backup within the day or two after making a recording.
- ❍ I typically create a backup within 1-2 weeks after making a recording.
- ❍ I typically create a backup within 1-2 months after making a recording.
- ❍ I typically create a backup within 6 months after making a recording.
- ❍ I typically create a backup within the year after making a recording.
- ❍ I typically wait a year or more to create a backup after making a recording.
- ❍ Other, please explain: _____

Part III. This section asks about the physical and digital formats that you use to store your research recordings.

7. On what media carriers are your research recordings stored? Use the left-hand column to indicate carriers for your originals and the right-hand column to indicate carriers for your backup copies. If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
MiniDisc (MD)	❑	❑
DVD	❑	❑
CD, CD-RW	❑	❑
CD-ROM	❑	❑
Digital audio tape (DAT)	❑	❑
Standard audio cassette	❑	❑
VHS tape	❑	❑
Other video tape format:	❑	❑
Reel-to-reel magnetic tape	❑	❑
Reel-to-reel film (24)	❑	❑
Shellac disc	❑	❑
Wax cylinder	❑	❑
Hard drive	❑	❑
Thumb drive (29)	❑	❑
Digital recorder (including iPod) (30)	❑	❑
Other carrier, please list:	❑	❑
Not applicable. (28)	❑	❑

8. You have indicated that some or all of your research recordings may be stored as digital files. What specific file formats have you used? If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
MP3	❑	❑
Other MPEG format	❑	❑
WAV (Waveform Audio File Format)	❑	❑
AIFF (Audio Interchange File Format)	❑	❑
MOV (Quicktime)	❑	❑
RIFF (Resource Interchange File Format)	❑	❑
OGG/ OGA (Ogg Vorbis)	❑	❑
BWF (Broadcast Wave Format)	❑	❑

ASF (Advanced Streaming Format)	❑	❑
AVI (Audio Video Interleave)	❑	❑
RM (Real Media)	❑	❑
WMV (Windows Media Video)	❑	❑
RF64	❑	❑
DivX	❑	❑
Other, please list:	❑	❑
I don't know.	❑	❑
Not applicable.	❑	❑

9. For your research recordings that exist as digital files, what bit depth(s) do you use most often? If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
8-bit	❑	❑
12-bit	❑	❑
16-bit	❑	❑
24-bit	❑	❑
48-bit	❑	❑
Other, please list:	❑	❑
I don’t know.	❑	❑
Not applicable.	❑	❑

10. For your research recordings that exist as digital files, what sampling rate(s) do you use most often? (Values are given in kilohertz.) If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
8 kHz	❑	❑
16 kHz	❑	❑
32 kHz	❑	❑
44.1 kHz	❑	❑
48 kHz	❑	❑

88.2 kHz	❑	❑
96 kHz	❑	❑
192 kHz	❑	❑
Other, please list:	❑	❑
I don't know.	❑	❑
Not applicable.	❑	❑

11. Are you familiar with the concept of a "loss-less" format? (Check one.)

❍ Yes
❍ No

12. In selecting a digital file-based format for your research recordings, how important is it to you to choose a "loss-less" format? If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check one.)	(Check one.)
It is not important to me.	❍	❍
It is somewhat important to me.	❍	❍
It is very important to me.	❍	❍
Not applicable.	❍	❍

Part IV. This section asks about your current practices for annotating your research recordings.

For the purposes of this survey, annotating could include any of the following:

- Labels written on or affixed to a physical format
- Accompanying paperwork that describes a recording's contents
- Data entered into a "file information" dialog box for a digital file
- Spoken descriptions of contents included at the beginning of an audio recording
- Information cards filmed at the beginning of a video recording
- A description of contents written on the leader of a reel-to-reel film or tape
- Any other documentation of a recording's contents

13. Do you annotate your research recordings? (Check one.)

- ❍ Always
- ❍ Most of the time
- ❍ About half of the time
- ❍ Less than half of the time
- ❍ Never
- ❍ Other, please explain: _____

14. You have indicated that you annotate some or all of your research recordings. What information about the recordings' contents do you typically include in your annotations? (Check all that apply.)

- ❑ An index number or a catalog number
- ❑ Your name, as person making the recording
- ❑ Title of research project
- ❑ Date of recording
- ❑ Time of day of recording
- ❑ City, town, or other place-name of recording location
- ❑ Geo-spatial coordinates of recording location
- ❑ Names of performers or participants included
- ❑ Titles of songs or performances included
- ❑ Musical instruments used
- ❑ Languages used
- ❑ Make/model of microphones used
- ❑ Make/model of recording device used
- ❑ Particular settings used on the recording device
- ❑ Microphone placement used for the recording
- ❑ Power source used during recording (battery, electrical outlet, etc.)
- ❑ Special recording techniques used
- ❑ Other information, please list: _____

15. You have indicated that you do not annotate all of your research recordings. What are your reasons for not annotating a recording? (Check all that apply.)

- ❑ I do not have enough recordings to warrant the effort.
- ❑ I have a storage method that allows me to identify my recordings without using labels.
- ❑ I do not have time.
- ❑ It did not occur to me.
- ❑ I do not know how.
- ❑ I do not remember to do so.
- ❑ Other, please describe: _____

16. When saving your recordings to digital file formats, how do you assign names to particular sound or video files? (Check all that apply.)

- ❑ I use the default numbering or naming supplied by my recording device.
- ❑ I have set up my recording device to apply file names automatically that include certain information such as date, time, or location.
- ❑ I use the default file name supplied by my audio editing software.
- ❑ I enter file names manually using a specific convention. Please describe: _____
- ❑ I enter file names manually without using any convention.
- ❑ Other: _____

Part V. This section asks about your current practices and future plans for storing your research recordings.

17. Where do you store your research recordings that exist as digital files? If you do not make backup copies, check the box for "Not applicable" in that column.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
On a personal computer's hard drive	❑	❑
On an institutional computer's hard drive	❑	❑
On an external hard drive	❑	❑
In Dropbox, Google, or other Cloud-based storage	❑	❑
On a server hosted by my institution	❑	❑
On a server hosted by a proprietary company	❑	❑
On CDs, CD-ROMs, or DVDs	❑	❑
On thumb drives	❑	❑
On an iPod, or other mobile device	❑	❑
Other, please describe:	❑	❑
Not applicable.	❑	❑

18. In what location(s) do you house the physical carriers* of your research recordings? For the purposes of this question, please consider the physical carriers of both analog and digital recordings. If you do not make backup copies, check the box for "Not applicable" in that column.

*A physical carrier can include tapes, CDs, and films, as well as hard drives, thumb drives, or digital recorders.

	Originals	Backup copies
	(Check all that apply.)	(Check all that apply.)
My private residence	❑	❑
My office at the institution where I'm employed	❑	❑
A library or archival repository located within the institution where I am employed	❑	❑
A library or archival repository located outside of the institution where I am employed	❑	❑
A residence or informal repository managed by research participant(s)	❑	❑
Other, please describe:	❑	❑
Not applicable.	❑	❑

19. About how many of the backup copies of your research recordings are stored in the same physical location or on the same server as the originals of your research recordings? (Check one.)

- ❍ None of my backup copies are stored in the same location as the originals.
- ❍ Fewer than half of my backup copies are stored in the same location as the originals.
- ❍ About half of my backup copies are stored in the same location as the originals.
- ❍ More than half of my backup copies are stored in the same location as the originals.
- ❍ Almost all of my backup copies are stored in the same location as the originals.
- ❍ All of my backup copies are stored in the same location as the originals.
- ❍ I don’t know.

20. What are your long-range plans for your research recordings? For this question, note that there is a third column for secondary copies other than backup copies. These could include any use copies, circulation copies, gift copies, etc. If you do not make backup or secondary copies, check the box for "Not applicable" in those columns.

	Originals	Backup copies	Other secondary copies
	(Check all that apply.)	(Check all that apply.)	(Check all that apply.)
I plan to discard or destroy them.	❑	❑	❑
I plan to deposit them at an institutional archive.	❑	❑	❑
I plan to deposit them with the community or individuals directly involved in my research.	❑	❑	❑
I plan to leave them with my own next-of-kin.	❑	❑	❑
I do not currently have long-term plans for these recordings.	❑	❑	❑
Other, please describe:	❑	❑	❑
Not applicable.	❑	❑	❑

21. You have indicated that you plan to deposit some or all of your research recordings with an institutional archive. Whom do you imagine as the users of those recordings? (Check all that apply.)

- ❑ Academic researchers
- ❑ Professors in need of listening or viewing examples for courses taught
- ❑ Research participants who are documented on the recordings
- ❑ Relatives of the participants documented on the recordings
- ❑ Members of the community documented on the recordings
- ❑ Inhabitants of the location where the recordings were made
- ❑ Other musicians not affiliated with the participants or with the location documented on the recording
- ❑ Record companies
- ❑ Other, please list: _____
- ❑ I don't know.

22. You have indicated that you do not plan to deposit your research recordings at an institutional archive. Why not? (Check all that apply.)

- ❑ It did not occur to me.
- ❑ It feels too soon for me to make plans for my recordings.
- ❑ I have not yet had time to consider long-range plans for my recordings.
- ❑ I do not know how to go about depositing my recordings.
- ❑ It would take too much time or effort to arrange a deposit.
- ❑ Depositing my recordings would violate the wishes of my research participants.
- ❑ There would be too many legal issues involved in depositing my recordings.
- ❑ My recordings would not have enough research value beyond my own work.
- ❑ My recordings would not make sense to anyone but me.
- ❑ I do not think that any institution would be interested in my recordings.
- ❑ Other, please describe: _____

Part VI. Additional information

23. In what year did you receive your terminal degree? (Check one.)

- ❍ Prior to 1960
- ❍ 1960-1964
- ❍ 1965-1969
- ❍ 1970-1974
- ❍ 1975-1979
- ❍ 1980-1984
- ❍ 1985-1989
- ❍ 1990-1994
- ❍ 1995-1999
- ❍ 2000-2004
- ❍ 2005-2009
- ❍ 2010-2013
- ❍ I am still in the process of completing my terminal degree.

24. Did the graduate program you attended as a student give you formal or informal training in any of the following? (Check all that apply.)

- ❑ Types of recording equipment
- ❑ Techniques of recording
- ❑ Types of recording formats
- ❑ Proper storage of audiovisual recordings
- ❑ Methods of labeling, indexing, or documenting the contents of research recordings
- ❑ Ethical issues in the making of research recordings
- ❑ Legal issues in the making of research recordings

Use this space to share any thoughts, experiences, or concerns related to research recordings formats, storage, or archives. These responses may be quoted in the final report, but will not be linked to data from any of the previous questions.

Thank you for taking the time to complete this survey, I very much appreciate your response. The completed report will be available to the public for download in Summer 2013 at http://dc.lib.unc.edu/cdm/landingpage/collection/s_papers. To locate the report on this site, enter "Wood, Jessica" into the author search box.